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EXAMINER

QUASH, ANTHONY G

ART UNIT PAPER NUMBER

2881

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/746,156

Applicant(s)

CHARLES PENNINGTON,  
GEORGE CARVER

Examiner

Anthony Quash

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondenc address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/14/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,13 are rejected under 35 U.S.C. 102(b) as being anticipated by Gross [523]. As per claim 1, Gross [523] discloses a storage system comprising a container having an outer wall and a first open end, the container defining an interior, a closure lid (40) configured to be inserted within the open end and adapted to engage in a sealing relationship with the outer wall; and a compression link (50) being configured to engage between the closure lid (40) and the outer wall of the container to retain the closure lid (40) engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the outer wall and the closure (40) lid engagement surface being adapted to engage the closure lid such that, the closure lid (40) is retained in sealing engagement with the outer wall. See Gross [523] abstract, figs. 1-23, col. 1 lines 10-50 col. 2 lines 55-67, col. 4 lines 35-67, col. 5 lines 30-55, and col. 6 lines 50-55.

As per claim 13, Gross [523] discloses a container having an outer wall and a first open end, the container defining an interior, a closure lid (40) configured to be inserted within the open end and adapted to engage in a sealing relationship with the outer wall and means for retaining the closure lid (40) in sealing engagement with the

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outer wall. See Gross [523] abstract, figs. 1-23, col. 1 lines 10-50 col. 2 lines 55-67, col. 4 lines 35-67, col. 5 lines 30-55, and col. 6 lines 50-55.

Claims 17,19,22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ahner [711]. As per claim 17, Ahner [711] discloses a method for storing a material comprising providing a container having a first open end and defining an interior, providing a closure lid (3) adapted to be received within the open end, sealing the closure lid (3) to the container by placing a portion of the closure lid (3) under compression and a corresponding portion of the outer wall under tension. See Ahner [711] abstract, fig. 1, col. 2 lines 5-40, col. 3 lines 10-35, col. 4 lines 55-69, col. 5 lines 1-15, and col. 5 lines 40-55.

As per claim 19, Ahner [711] discloses providing an outer lid (4) configured for engaging a distal end of the container such that the closure lid (3)) is disposed between the outer lid (4) and the interior, and retaining the outer lid (4) in sealing engagement with the container. See Ahner [711] abstract, fig. 1.

As per claim 22, Ahner [711] discloses inserting an exothermic material within the container prior to sealing the closure lid (3). See Ahner [711] abstract, fig. 1, col. 2 lines 5-40, col. 3 lines 10-35, col. 4 lines 55-69, col. 5 lines 1-15, and col. 5 lines 40-55.

As per claim 23, Ahner [711] discloses the exothermic material being spent nuclear fuel. See Ahner [711] abstract, fig. 1, col. 2 lines 5-40, col. 3 lines 10-35, col. 4 lines 55-69, col. 5 lines 1-15, and col. 5 lines 40-55.

Claims 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Baatz [454]. As per claim 13, Baatz [454] discloses a container (6) having an outer wall and

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a first open end, the container defining an interior, a closure lid (2) configured to inserted within the open end and adapted to engage in a sealing relationship with the outer wall, and means for retaining the closure lid (2) in sealing engagement with the outer wall. See Baatz [454] abstract, figs. 1-3, col. 1 line 25-55, col. 2 lines 25-65, col. 3 lines 19-69, and col. 4 lines 1-65.

As per claim 14, Baatz [454] discloses an outer lid (19) configured for engaging a distal end of the container (6) such that the closure lid (2) is disposed between the outer lid (19) in sealing engagement with the container (6). See Baatz [454] abstract, figs. 1-3, col. 1 line 25-55, col. 2 lines 25-65, col. 3 lines 19-69, and col. 4 lines 1-65.

As per claim 15, Baatz [454] discloses an exothermic material, wherein the exothermic material has been inserted within the container and sealed therein. See Baatz [454] col. 1 lines 45-55.

As per claim 16, Baatz [454] discloses the exothermic material being spent nuclear fuel. See Baatz [454] col. 1 lines 45-55.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Baatz [454]. As per claim 1, Baatz [454] teaches a container (6) having an outer wall and a first open end, the container (6) defining an interior, a closure lid (2) configured to be inserted within the open end and adapted to engage in a sealing relationship with the outer wall, and compression link (11). See Baatz [454] abstract, figs. 1-3, col. 1 line 25-55, col. 2 lines 25-65, col. 3 lines 19-69, and col. 4 lines 1-65. However, Baatz [454] does not specifically state a compression link having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the outer wall of the container to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being adapted to engage the outer wall and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the outer wall. Instead Baatz [454] teaches a compression link (11) for engaging the closure lid (2) to the container (6) is an equivalent structure known in the art. See Baatz [454] abstract, figs. 1-3, col. 1 line 25-55, col. 2 lines 25-65, col. 3 lines 19-69, and col. 4 lines 1-65. Therefore, because these two closure lid systems were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the closure lid system in applicants' invention for the closure lid system in Baatz [454] in order to secure a lid to a container.

As per claim 2, Baatz [454] teaches the outer wall having a closure lid retention ledge formed thereon, and wherein the container engagement surface is adapted to engage the closure lid retention ledge. See Baatz [454] fig. 2.

As per claim 3, Baatz [454] teaches the closure lid (2) having a stepped outer surface defining an annular region, and wherein the compression link (11) is adapted to be received within the annular region. See Baatz [454] abstract, and figs. 1-3.

As per claim 4, Baatz [454] teaches the outer wall having a recess formed therein for receiving at least a portion of the compression link (11,13). See fig. 2, col. 2 lines 25-40 and col. 4 lines 1-60.

As per claim 5, Baatz [454] teaches all aspects of the claim except for specifically stating a backing member adapted to be inserted between the closure lid and the compression link such that insertion there between urges the compression link radially outwardly from the closure lid and positions the container engagement surface of the compression link for engagement with the outer wall. Baatz [454] does however, teach a backing member (3) adapted to be inserted between the closure lid (2) and the container outer wall. It also teaches a compression link (11,13) for securing the closure lid to the container. See Baatz [454] abstract, figs. 1-3 and col. 3 lines 40-69.

Therefore the examiner takes official notice between the backing member (3) in Baatz [454] and the backing member in applicants' invention for the use in providing a snug fit for the closure lid since both backing members will in apply pressure radially outward and inward when the compression member is pushed down.

As per claim 6, Baatz [454] teaches an outer lid (19) configured for engaging a distal end of the container such that the closure lid (2) is disposed between the outer lid (19) and the interior.

As per claim 7, Baatz [454] teaches all aspects of the claim except for specifically stating a bearing member configured to engage the closure lid and the closure lid engagement surface of the compression link, the bearing member being formed of a material harder than a hardness of the closure lid. However, Baatz [454] does teach a backing member (3) being configured to engage the closure lid with the container and the compression link being configured to secure the lid with the container. See Baatz [454] abstract, figs. 1-3, col. 1 line 25-55, col. 2 lines 25-65, col. 3 lines 19-69, and col. 4 lines 1-65. Although Baatz [454] does not specifically teach the bearing member being formed of a material harder than a hardness of the closure it would have been obvious to one of ordinary skill at the time the invention was made to have the bearing member be formed of a material harder than a hardness of the closure in order to withstand the pressure exerted on it when the compression member is pushed into all the way in.

As per claim 8, Baatz [454] teaches an exothermic material, wherein the exothermic material has been inserted within the container and sealed therein. See Baatz [454] col. 1 lines 45-25.

As per claim 9, Baatz [454] teaches the outer lid (19) has a lid hold-down member (40-42) associated therewith for retaining the outer lid (19) in sealing engagement with the container (6). See Baatz [454] figs. 1-3 and col. 34-40.



As per claim 10, Baatz [454] teaches all aspects of the claimed invention except for the bearing member having a recess formed therein, the recess being adapted to receive the closure lid engagement surface of the compression link, and wherein the closure lid has a stepped outer surface, the stepped outer surface being adapted to engage the bearing member. Baatz [454] does teach the bearing member (3) having a recessed formed therein, the recess being adapted to receive the closure lid (2) engagement surface and the container surface, wherein the closure lid has a stepped outer surface, the stepped outer surface being adapted to engage the bearing member (3). See Baatz [454] figs. 1-3, col. 3 lines 40-50. Therefore the examiner takes official notice the equivalence between the configuration in Baatz [454] and that of applicants' invention for their the use in securing the closure lid in a sealing manner to the container.

As per claim 11, Baatz [454] discloses the exothermic material being spent nuclear fuel. See Baatz [454] col. 1 lines 45-55.

As per claim 12, Baatz [454] teaches the outer wall having a recess formed in an outer surface thereof, and wherein the hold-down member having a retention ledge configured to engage the recess. See Baatz [454] figs. 1-3 and col. 4 lines 30-40.

Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahner [711]. As per claim 18, Ahner [711] discloses sealing the closure lid (3) to the container comprising the steps of providing a compression link (7,16) having a container engagement surface and a closure lid engagement surface. However, Ahner [711] does not specifically teach engaging the compression link between the closure lid (3)

and the outer wall of the container such that the closure lid is retained in sealing engagement with the outer wall. Ahner [711] does however teach the engaging the compression link to the closure lid (3) and the outer wall of the container such that the closure lid (3) and the other wall provide a seal for sealing the container. See Ahner [711] fig. 1 and col. 5 lines 1-13. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to engage the compression link between the closure lid (3) and the outer wall of the container such that the closure lid is retained in sealing engagement with the outer wall since the examiner takes official notice of the equivalence of the sealing means in applicants invention and the sealing means provided in Ahner [711] for there use in the art of container sealing.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahner [711] in view of Baatz [454]. As per claim 20, Ahner [711] teaches all aspects of the claim except for providing a backing member, and inserting the backing member between the closure lid and the compression link such that insertion there between urges the compression link radially outwardly from the closure lid. Baatz [454] teaches providing a backing member (3) being between the closure lid and the container surface such that insertion of the bearing member (3) urges the compression link (11) radially. See Baatz [454] figs. 1-3 and col. 3 lines 40-55. Therefore the examiner takes official notice between the backing member (3) in Baatz [454] and the backing member in applicants' invention for the use in providing a snug fit for the closure lid since both backing members will in apply pressure radially when the compression member is pushed down.

As per claim 21, Ahner [711] in view of Baatz [454] teach all aspects of the claim except for specifically stating providing a bearing member formed of a material harder than a hardness of the closure lid, and inserting the bearing member between the closure lid and a portion of the compression link. However, Baatz [454] does teach a backing member (3) being configured to engage the closure lid with the container and the compression link being configured to secure the lid with the container. See Baatz [454] abstract, figs. 1-3, col. 1 line 25-55, col. 2 lines 25-65, col. 3 lines 19-69, and col. 4 lines 1-65. Although Baatz [454] does not specifically teach the bearing member being formed of a material harder than a hardness of the closure it would have been obvious to one of ordinary skill at the time the invention was made to have the bearing member be formed of a material harder than a hardness of the closure in order to withstand the pressure exerted on it when the compression member is pushed into all the way in. With respect to the applicants' claim of inserting the bearing member between the closure lid and a portion of the compression link, the examiner takes official notice between the backing member (3) in Baatz [454] and the backing member in applicants' invention for the use in providing a snug fit for the closure lid since both backing members will in apply pressure radially when the compression member is pushed down.

**Conclusion**

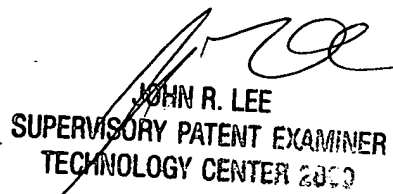
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 4,698,510 to Handke et al, and 4,633,091 to Kurasch et al. are considered pertinent to applicants' disclosure. Kurasch [091] is considered pertinent because of its discussion on a container for the storage transportation and ultimate disposal of low level nuclear wastes. Handke [510] is considered pertinent because of its discussion on multiple reservoir transportation assembly for radioactive substances and related method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Quash whose telephone number is (703)-308-6555. The examiner can normally be reached on M-F from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee, can be reached on (703)-308-4116. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.



A. Quash 4/6/03



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